

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Previously Presented) A battery-powered system for acquiring and transmitting data between two or more plant locations relative to detected conditions and/or events in a plant, said system comprising:

- at least first and second detectors in said plant to detect conditions or events, the detectors mounted at first and second plant locations, the first detector comprising a temperature detector, and the second detector comprising a detector to detect a condition or event selected from the group consisting of a fugitive emission, a level, and a pressure;

- at least two battery-powered radio frequency transmitters mounted at the first and second plant location in said plant in electrical communication with the first and second detectors, said transmitters having transmittable identification codes and wirelessly transmitting signals relative to said identification codes, the detectors, and condition of the batteries to a location remote from the first and second plant locations;

- a central processing location remote from the first and second plant locations for receiving and processing signals from said battery-powered transmitters in electrical communication with said detectors, said signals relative to the identification codes, conditions or events detected at the first and second locations in said plant, and the batteries; and

- a third transmitter in communication with said central processing location, said third transmitter mounted at a third plant location capable of wirelessly transmitting signals relative to a condition or event detected to the central processing location.

2. (Previously Presented) The system of Claim 1, further comprising at least one more detector and/or sensor to detect and/or sense one of the conditions or events at a fourth plant location.

3. (Previously Presented) The system of Claim 2, further comprising at least one transmitter in communication with said at least one more detector and/or sensor.

4. (Previously Presented) The system of Claim 3, wherein the at least two battery-powered radio frequency transmitters are spread spectrum transmitters.

5. (Previously Presented) The system of Claim 4, wherein the at least two battery-powered radio frequency transmitters are 900 megahertz spread spectrum transmitters.

6. (Previously Presented) The system of Claim 1, wherein one of the at least two battery-powered radio frequency transmitters is a 900 megahertz spread spectrum transmitter and transmits on predetermined time intervals.

7. (Previously Presented) The system of Claim 1, wherein said third transmitter comprises a radio frequency transmitter.

8. (Previously Presented) The system of Claim 7, wherein said third transmitter comprises a spread spectrum radio frequency transmitter.

9. (Previously Presented) The system of Claim 8, wherein said third transmitter comprises a 900 megahertz spread spectrum radio frequency transmitter.

10. (Previously Presented) The system of Claim 4, wherein said third transmitter comprises a 900 megahertz spread spectrum radio frequency transmitter.

11-18. (Canceled)

19. (Previously Presented) The system of Claim 1, wherein at least one of the detectors is positioned in communication with a pipe in said plant.

20. (Previously Presented) The system of Claim 1, wherein at least one of the detectors is positioned in communication with a valve in said plant.

21. (Previously Presented) The system of Claim 1, wherein at least one of the detectors is positioned in communication with an enclosure in said plant.

22. (Canceled)

23. (Previously Presented) The system of Claim 1, wherein the second detector detects a pressure.

24. (Previously Presented) The system of Claim 1, wherein the second detector detects level.

25. (Previously Presented) The system of Claim 21, wherein the second detector detects a fugitive emission.

26. (Previously Presented) The system of Claim 23, further comprising at least a third detector in said plant, said third detector in electrical communication with at least one battery-powered radio frequency spread spectrum transmitter, said third detector detecting temperature.

27. (Previously Presented) The system of Claim 21, wherein at least one of the detectors detects emissions.

28. (Previously Presented) The system of Claim 21, wherein at least one of the detectors is an adsorption detector.

29. (Previously Presented) The system of Claim 1, wherein at least one of the detectors detects emissions.

30. (Previously Presented) The system of Claim 1, wherein at least one of the detectors is positioned in communication with a pipe enclosure.

31. (Previously Presented) The system of Claim 1, wherein at least one of the detectors is positioned in communication with a valve stuffing box enclosure.

32. (Previously Presented) The system of Claim 1, wherein at least one of the detectors is operable when a voltage from the battery is applied thereto, and at least one of the battery powered radio frequency transmitters is a 900 megahertz spread spectrum radio frequency transmitter, said transmitter transmitting signals on predetermined time intervals, and transmits, when appropriate a low battery transmission signal.

33. (Previously Presented) A battery-powered system for monitoring and/or detecting events and/or conditions in a plant, said system comprising:

- an exhaustible power source comprising a battery, said battery supplying a voltage;
- a detector mounted at a first location in the plant, said detector operable when voltage from the battery is applied thereto and monitoring and/or detecting an event and/or a condition in the plant relating to an enclosed material in the plant;

a first transmitter mounted at the first location in the plant, said transmitter operable when voltage from the battery is applied thereto, said transmitter in electrical communication with the detector, the transmitter wirelessly transmitting signals relating to an event and/or condition monitored and/or detected by the detector from the first location in the plant, and said transmitter wirelessly transmitting, when appropriate, a low battery signal;

a second exhaustible power source comprising a battery, said battery supplying a voltage;

a second transmitter mounted at a second location in the plant remote from the first location, said transmitter operable when a voltage is applied thereto by the second battery, said transmitter wirelessly transmitting signals relating to a monitored and/or detected event and/or condition in the plant, and said transmitter wirelessly transmitting, when appropriate, a low battery signal; and

a central processing location remote from the first and second plant locations for receiving and processing signals from said first and second transmitters.

34. (Previously Presented) A system according to Claim 33, wherein the enclosed material is enclosed in a pipe.

35. (Previously Presented) A system according to Claim 33, wherein the enclosed material is enclosed in a valve stuffing box.

36. (Canceled)

37. (Canceled)

38. (Previously Presented) A system according to Claim 33, wherein the enclosed material is a liquid and the detector monitors and/or detects level.

39. (Previously Presented) A system according to Claim 33, wherein the detector monitors and/or detects pressure.

40. (Previously Presented) A system according to Claim 33, wherein the detector monitors and/or detects temperature.

41. (Previously Presented) A system according to Claim 33, wherein the detector monitors and/or detects more than one event and/or condition.

42. (Previously Presented) A system according to Claim 33, wherein the detector monitors and/or detects emissions from an enclosure.

43. (Previously Presented) A system according to Claim 42, wherein the detector further monitors and/or detects temperature.